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SEA-WEED HARVEST IN JERSEY.

A TWELVEMONTH'S sojourn in Jersey enables a visitor to become acquainted with usages which, if not peculiar to the island and its neighbours, at least present themselves to his notice under novel and specially interesting forms. Some of his leisure will of course be spent in the immediate neighbourhood of the sea, where he will be brought into contact with that portion of agricultural labour which consists in reaping and collecting sea-weed, or as it is locally termed, *vraic*, an article of paramount importance to the husbandman.

In many districts of the United Kingdom, in Denmark and other northern countries of Europe, sea-weed is utilised for manurial purposes; but nowhere is the value of these marine plants as fructifiers of the land more highly and justly appreciated than in Jersey, where the soil lacks those chemical properties which are supplied by *vraic*. As statistical evidence of the importance of this manure, it may be observed that, as approximatively as can be estimated, not far short of a hundred thousand tons are annually applied to about twenty-five thousand statute acres of land.

Vraic, or *varech*, is of two kinds, *vraic venu* or *de marée*, and *vraic taillé*; distinguished not by any great difference in nature or fertilising properties, but by the manner in which they are obtained. The former term applies to sea-weed torn from the stones and rocks by the waves and cast upon the shore; and the latter to that which is cut or reaped from the rocks on which it grows.

With an eye to his crops, the husbandman secures drift-weed all the year round. Unless otherwise very busily engaged, he exercises a watch over the beach or cove nearest to his homestead, especially when there has been a gale of wind or a storm; and as soon as he knows the receding tide is likely to deposit the coveted *vraic*, he starts with horse and cart for its collection at low-water, either on the broad and level sands, or among the gullies, where his experi-

ence has taught him to expect the greatest quantity, according to the direction of the wind. The quantity of drift sea-weed which finds itself washed up in some of the small creeks is truly amazing. In one of them, *Le Pulec*, the width of which averages about thirty yards, it is not unusual to obtain, during or after a south-westerly gale, over forty tons of this manure in one tide. Numbers of poor people who live near the beach earn their livelihood by labour of this kind. They dry the weed, and afterwards sell it in stacks; or burn it, and dispose of the ashes.

Local records show that the business has, almost from time immemorial, been regulated by the authorities; and definite legislative enactments have been passed on the subject since the commencement of the sixteenth century. No surprise is therefore created by hearing a Jersey farmer use the local proverb, *Point de vraic, point de hautgard* (No sea-weed, no corn-stacks). Very stringent are these regulations; and from the extreme difficulty of avoiding detection, as well as from the interested motives of the officials and others concerned, it is probable that no law is so well observed in the little *quasi*-republic. The statute now in force was passed by the States of the island in 1866, and duly confirmed by Her Majesty in Council.

On the west coast, cutting is allowed during three spring-tides, commencing usually with the highest tide in March, and never extending beyond the 23d of April. Only two tides are allowed for cutting the *vraic* on the east coast at this season; but the balance is adjusted by the permission to cut it during the highest tide in the month of May. Early in the year, the Constables or mayors of the different parishes hold meetings of their respective vestries, to confer with them as to the most suitable tides; they then present themselves before the Royal Court, convened in full strength, which fixes the time in accordance with the opinion of the majority of Constables. In the first decade of the seventeenth century, the Royal Commissioners, Gardiner and Hussey, definitively confirmed the right of the Royal Court to fix the

time for harvesting the vrac, 'the saide Bayliffe and Jurats only, being,' in their opinion, 'men of the best understanding and experience to deal in a matter of that nature.'

In the six western parishes, the *vrac venu* or drift-wrack in most of the different localities is divided into portions, and allotted in proportion to the quantity of land occupied by the claimants. In January, the vestry of each parish meets; and those who intend gathering vrac during the year have to produce a properly authenticated statement of the size of their holdings, a list of the same being transmitted to officials whose sworn duty it is to superintend the allotment. These officers have to be present at day and night tides; and for their services obtain a bonus of two lots each tide. In certain of the most important bays, it is forbidden to gather drift-weed before sunrise or after sunset, or before the receding tide has left uncovered well-defined marks. The gathering of this kind of sea-weed on the east coast is free from sunrise on Monday to sunset on Saturday; and the vracickers may collect it in the sea, provided they do not wade beyond two feet in depth. Vrac officers are instructed to apportion lots nearest to the shore for the poor who have neither horse nor cart, and who may often be seen wearily wheeling barrows through loose shingle or sand to deposit their share beyond high-water mark. Heavy fines hang over the heads of any whose covetousness might induce them to alter the marks of a neighbour's allotment.

When the red-robed but wigless justices have proclaimed the day for the commencement of the harvest of *vrac taillé*, or cut-wrack, preparations for the anticipated event commence in every agricultural home. Those who have boats, at once turn their attention to that quarter. The heavy but capacious craft is emptied of the odds and ends which have there found a lodging-place in the long months during which it has been safely housed in the shed. Its timbers are well overhauled, and then tarred; and the necessary gear and oars also undergo rigid survey; and a day or two before it is required, it is taken to the shore. The horses are fresh-shod, and the ordinary sides of the carts are replaced by hurdle-like frames, which answer the double purpose of being lighter and of greatly relieving the horses, by allowing free drainage to their load. Odd moments are spent in repairing the old harness and straw horse-collars; the waste end of a new tether does very well to replace a damaged strap, and the discarded breeching is found to merit one more trial. The large steel forks are seen to; and the short sickles, used for no other purpose, are brought to light, and young *patate* gladly turns the handle while his senior gives them the benefit of the grindstone.

Be the great day ushered in by sunshine or rain, a temperate southerly breeze, or a keen, biting north-easter, with occasional showers of snow or hail, the party is ready to start at the appointed hour. The husbandman with his sons and more daughters, servants, and perhaps a stray friend or two from town, ride in the carts which, thus loaded, present a striking appearance from the immense variety of attire. The sterner sex have thick woollen gabardines or jerseys; old coats, the colour of which has been mellowed by age into neutral tints; inexpressibles of corduroy, with

perhaps but one small patch of the original material still to be seen; and stout, well-nailed boots. The fairer portion of the group wear an alpaca or linsey dress, the thick jacket or warm plaid shawl, and the sun-bonnet, or chip or straw hat, trimmed with ribbon and artificial poppies. Hard and soaking work for hands, arms, feet, and legs, and often in exposed situations, renders care of the inner man of prime importance; and an unstinted provision is made of vrac cakes—the ingredients of which are flour, eggs, milk, butter, sugar, and currants or raisins—boiled pork, a large keg of cider, and a smaller one of brandy.

Want of company cannot be made a source of complaint, for at every turning on the journey seawards, the number of carts increases, until each arrival on the selected beach forms but a unit in a goodly procession. Among some stretches of rocks, such as those near the Corbière lighthouse, the vracickers may be numbered by hundreds, some of them being five or six miles from their homes.

Arriving on the shore about one to two hours after high-water, some proceed in the boats to the more distant rocks, where, long before low-water, goodly heaps will be ready to be carted. The others, following the lead of some experienced guide, wend their way through the yet partly submerged cart-tracks, cut among the rocks; and for the repair of which the west Constables are authorised to sell sufficient vrac, and those of the east to levy an annual contribution of sixpence upon such as habitually make use of them. When once the selected spot is reached, cutting has to be carried on in good earnest, for 'time and tide wait for no man.' By the side of each worker, a heap soon accumulates, and the horses as well as the vracickers come in for heavy work. Load after load is carted above the reach of the next flow; and if more is cut than can be thus secured, recourse is had to the process of 'stoning.' This consists in covering with large stones the heaps, which are afterwards carted away at the night-ebb. The turn of the tide gives warning to prepare for the journey homewards. The carts are laden with extra care; and the small but muscular and well-bred horses, whose ability to make sure their footing among the slippery rocks and weed-grown pebbles is wonderful, drag along their heavy loads, from which the brine is copiously dripping. The boats are coming up with the tide; and their former passengers have to make their return-journey on foot, trudging along like a line of skirmishers moving in slow time. Day after day, until the tide commences to neap, the work is the same; and on the last day or two, some members of the party usually spend their time in 'fishing' limpets or crabs.

The termination of the season was formerly made the occasion of hot suppers for all, generally followed by singing, card-playing, dancing, or other amusements; but these harvest-home festivities are rapidly becoming numbered among the things of the past.

A great portion of the vrac is carted directly from the shore to the fields and meadows, where it is spread on the grass; and its effects, especially if the season be moist, are extremely beneficial to the grass and hay crops. Some is ploughed in as manure for potatoes, wheat, barley, or other crops; and on this subject the Rev.

Philip Falle, a trustworthy historian of Jersey, who wrote in 1734, says: 'The Winter Vraic being spread on the Green Sward, and after buried in the Furrows by the plough, 'tis incredible how with its fat unctuous Substance it meliorates and fertilises the earth, imbibing itself into it, softening the Clod, and keeping the Root of the Corn moist during the most parching Heats of Summer.' The remainder, as well as most of that which is gathered at other times during the year, is dried on the commons near the shore, and used as kitchen fuel in the farms, or burned in stacks. The ashes are applied as a top-dressing to cereals and other crops; and they unquestionably increase the returns very materially. The burning vraic has a strong briny smell; but it is believed to be excellent for invalids, and the healthy soon become accustomed to it, and like it.

Guano and other fertilising agents are, in Jersey as elsewhere, coming into general use; but they will never be made to replace vraic, which is efficacious, cheap, easily obtained, and apparently inexhaustible.

THE FORTUNES OF BERTRAM OAKLEY.

CHAPTER XXI.—WORSE AND WORSE.

WINTER at its bitterest and bleakest had set in—a sharp winter, one of those old-fashioned seasons that only schoolboys, skaters, and ice-curlers enjoy—a bleak, white Yule-tide. And, very unfortunately, it was not only the Thames that froze, so that some rash adventurers were said to have crossed from Wapping to Rotherhithe dry-shod, but the lifeblood of Commerce appeared to be congealing too, and something was amiss with the great world of buyers and sellers. There was a depressed money market. The Bank rate of discount went up as the mercury sank in the thermometer. Reports of foreign failures were followed by the nearer crash of British firms hollow at the heart, and something very like a Panic had set in. Down sank the stocks, trade stagnated, and mills worked half-time, and furnaces were blown out, and there was a general hurry to clip and pare and prune, and cut down working expenses, everywhere.

Among the firms which felt the altered state of things was that of Bertram's employers. At the best of times, there had been wise old heads in the City which were shaken when mention was made of the vast wealth and extended operations of Groby, Sleather, and Studge. As to the extent of the operations, no doubt existed. There was hardly a constructive pie in Europe, from a Swiss Alpine railway to a grand scheme for regenerating the silted-up harbours of dead old Provengal and Italian seaports, into which Groby, Sleather, and Studge had not thrust their bold fingers. But whether the house had capital enough to meet its widespread liabilities, with a falling market and at a moment of adversity, was quite another affair.

Bertram even, in his humble and exoteric relations with the grand Westminster firm, began to find the difference. Summer, so to speak, was over, the golden summer of speculative prosperity, when projects were easy to float, and bankers trusting, and a prospectus pleasant reading to

bonâ fide investors, as when money is abundant and hopes are high. There came to be dreadful gaps—*lacunæ*, as the Romans would have phrased it—in the continuity of Bertram's work. A week without copying meant a week of semi-starvation, and the young man began to apprehend the day when there should be no more employment, and Hunger should reign supreme. That the house of Groby and partners was in a bad way, was pretty clear. Many petty signs pointed out the unwelcome truth, as straws show which way the wind blows. Discipline was relaxed. The clerks in Room E read their newspapers quite openly, and gossiped in knots, neglecting their regular routine, yet almost unreprieved by Mr Tomkins, now strangely moody and despondent, and given to biting his nails as he sat with drooping head behind the brass rails of his desk. Studge the terrible, seemed now to have lost the art of inspiring fear. His very bell rang less shrilly, and when it rung, nobody started up or rushed, as if at the sound of an alarm-signal, to answer to the call. And when Mr Studge was seen in the flesh, it was with his felt hat pulled down over his brows, and an air of sully despair.

'Soon have a total break-up here,' whispered one of the satellites to another, just as private soldiers venture in a losing campaign to express their opinion. Indeed, it seemed only too probable. Where were the throngs of anxious visitors who had once sued so importunately for an audience? Where were the corpulent German capitalists, with thumb-rings gleaming on their unwashed hands? Where the Parsees, opal-eyed, the glossy foreign Jews, the sharp-eyed Yankees, the pushing Greeks, the sallow Portuguese, whose feet had once been so familiar with the spotless stone stairs and the fair crimson carpeting? They were gone, all gone. Rats, it is said, are warned by some subtle instinct to quit a house that totters to its fall.

Bertram's meditations, as he sat before the stinted modicum of fuel faintly burning in his rusty stove, in his garret in the Old Sanctuary, were none of the pleasantest. What was he to do, expecting, as he did, the speedy cessation of all work, all pay? He might have envied the old vine below, for its tough endurance, as it slept through the cold chill of Winter, waiting till its sap should be stirred into motion by the first caress of Spring. His sagest plan, it might be said, would have been to provide himself with other employment. But such counsel would in his case have been almost a mockery. Who would give him work, at a time when labour seemed a drug in the market, and powerful men in fustian were lounging discontentedly about the streets, vainly looking for something that their strong hands might do? Labourers, clerks, shopmen, all seemed to be in excess of the demand for their services. It was a hard time for the poor.

Bertram had led but a secluded life in London, the life of a quiet student, who makes few friends, and none that were in a position to help him in the opening a new career. There are turning-points in human fortune when even the strongest and most self-reliant of us all feel the want of a friendly hand to guide, a friendly shoulder on which to lean for a breathing space before breasting the uphill road. Bertram Oakley, the foundling of the beach, the ex-mill-worker, had no kindred

to turn to, no comrade with whom to hold counsel. There was no cohesion, no bond of union, between the helots of Messrs Groby, Sleather, and Studge. Most of Bertram's fellow-toilers were shambling, disappointed men of middle age, red-eyed, bowed as to their shoulders, white as to the elbows and seams of their closely buttoned coats, shabby-genteel men, who might have been broken-down butlers or provincial actors in quest of an engagement that never could be found.

Of the two frank-hearted young artied pupils, who in their honest way had recognised in Bertram their natural superior, so long as they had regarded him as an officer, not a private, in the industrial army, the occupant of Mr Browse's garret had very easily lost sight. No real intercourse is possible between those whose work is routine, and their leisure a blithesome holiday, and the genuine toiler for daily bread. And now both were gone, Brooks having been withdrawn by his father, who had found a better opening for him at Melbourne; and Davis having seen his sanguine hope of being 'sent foreign' realised, and being accordingly stationed in some airless, sun-baked oven of an island, the crumbling rocks of which jut out into the Red Sea, and in company with five telegraphists or electricians, a surveyor-in-chief, an interpreter of no particular nation, a score of Arabs, and half as many English navvies, there to establish a coaling depôt for a brand-new line of steamers, in competition with the P. and O. Nobody at Groby, Sleather, and Studge's knew or cared about Bertram Oakley.

Of Dr Denham's daughters, Bertram had for several weeks seen and heard nothing. He had become ashamed of calling in Lower Minden Street, as his coat gradually became shabbier and more threadbare, lest the poverty he could not hide should indirectly excite in the mind of Mrs Conkling, the landlady, a prejudice against her young-lady lodgers. And then, he had nothing to say. High hopes, a high estimate as to his capabilities and his future, had been entertained both by his former kind benefactor and by Louisa and Rose. Louisa was working—Louisa had work to do, had pupils, had houses where she was welcomed. But Bertram, what had he? Merely a few dwindling shillings a week, threatening soon to come to an end altogether, and earned by mere painstaking drudgery, never, so it seemed, to lead to anything better.

Bertram's acquaintance in London was very limited. There was Mr Walter Denham, to be sure, who had, oddly enough, shown a personal liking for the clever stripping from Blackston, that contrasted with his unnatural harshness towards his bereaved nieces. But Bertram could not readily have brought himself to ascend the doorsteps of that pretty Kensington villa, or to confront its mocking master, a second time. And if he did, what would be the use of it? Uncle Walter was never serious for two consecutive minutes. And Bertram would sooner have starved in real earnest, than have craved a boon at such hands.

Whom else, within the Bills of Mortality, did Bertram Oakley know? So very, very few, that he took himself to task for permitting his memory to wander so often as it did to the recollection of the nameless vagabond whom he had picked, battered and half-dead, out of a ditch. And yet,

when Bertram came to think of it, the vagabond was not exactly nameless. He had spoken of himself, in the course of his rattling talk, as 'Nat Lee.' Bertram was quite sure that the man was unaware of the slip which he had made in social tactics, always under the supposition that he desired to conceal his identity. But quick-witted, scampish persons, such as Mr Nathaniel Lee, by his own showing, certainly was, and whose brains, moreover, are always more or less under alcoholic influence, are apt to blurt out inconvenient truths without even being aware that they utter them. Bertram knew that. Even his short experience of the world had taught him how habitual drink flusters and muddles a man's intellect and nerves—how it unlooses the tongue and fuddles the brain. He had no more doubt that Nat Lee was the man's real name, than he had that the man was unconscious of having mentioned it. Such men bear many names, changing patronymics quicker than the chameleon of the classic poets changed its colour; but somehow, the true name always lies uppermost, ready to be blabbed in a moment of confidence.

Bertram was almost angry with himself for wasting a thought upon the wayside wretch whom he had succoured in the hour of need. Never did he repent of his kindness. He would have done ten times what he did, willingly, to lend a helping hand to one far viler and more degraded than Nat Lee, who had not seemed wholly bad. But he could not conceive why his mind should so often dwell upon the remembrance of the self-denounced scoundrel, save that he was somehow mixed up with the prosperous past and the changed fortunes of his benefactor's family. He had spoken of Dulchester and the Old Bank and Dr Denham's wealthy father. He had spoken, grinding his teeth the while, of some one who should pay for it, in purse or person, if Nat Lee's fortune, long sought by crooked ways, were not made at last. Could this, Bertram thought, be Mr Walter Denham?

Uncle Walter and Nat Lee! the juxtaposition of those two names appeared the climax of absurdity. What could there be in common between the brilliant dilettante, the accomplished, elegant voluptuary, and this fierce, half-educated adventurer? Grant that Mr Lee's account of himself was correct, and that he had really been one of the clerks at Dulchester Old Bank, a smart, well-dressed provincial coxcomb, of decent parentage and tolerable schooling—still, there was no probability of anything beyond the barest acquaintance between the banker's younger son and Nat Lee, much his junior. And what could Nat Lee have to tell of the cruel testamentary dispositions of old Mr Denham, who had changed his mind so groundlessly, and hardened his heart so abruptly against his noble-minded elder son? Bertram could not divest himself of the idea that the man he had found in evil case in a ditch, really had something to tell which, if told and substantiated, would redeem his dead friend's daughters from undeserved misfortune. The very malignity with which this Lee had spoken of some person unnamed, seemed to mean much. In mentioning the ruffians who had dogged his course, had set upon him unawares, had beaten, trampled, and robbed him, leaving him for dead where he lay, the victim had be-

trayed no resentment. He had spoken humorously, tolerantly, of his assailants, smarting, as he yet was, from the effects of their violence. It was plain that he considered the ill-usage he had received as a natural episode in his dubious career. A Welsher—Bertram had by this time learned that the word is typical of the tribe of unscrupulous knaves who bet on race-courses, repudiate their losses, and trust to their heels to escape savage mishandling by mob and creditors—must expect ill-treatment. But Nat Lee had been bitter as he alluded to some nameless foe. Could that foe have been Mr Walter Denham?

Bertram, who, as has been said, had only too much time at his disposal, had found his way not once or twice, but three, four, or five times, to Limbo Street, Piccadilly, where stands Rundle's Hotel, to which Nat Lee, hatless, blood-stained, and in tattered garments, had directed himself to be driven. He was quite familiar with the aspect of that fourth-rate sporting hostelry, always with a Hansom cab, empty, waiting on speculation before the door. On the mat would often be visible, cigar in mouth, one, two, or three horsey-looking personages, in tight Newmarket coats and natty trousers, or in loud-patterned suits of tweed, but always with coarse, mean, ignoble features—guests presumably at Rundle's. These delectable customers would growl out a sentence or two among themselves; and sometimes pocket-book and pencil were produced to write down the terms of a wager; but Nat Lee was never of the group. Once, when the doorway's only occupant was a thick-set, black-whiskered waiter off duty, napkin in hand, and staring about him, Bertram crossed the street and ventured on a question.

'Lee? Which Lee?' asked the waiter in return. 'Mr Lee was staying here, I know,' said Bertram. 'His Christian name was, I believe, Nathaniel, or Nat.'

'Gone to Queer Street, long ago,' answered the waiter, with a broad grin.—'I say, Dick!' he added, turning to the Boots, in a striped waistcoat, who had now come up, and was leering sympathetically; 'here's a young gent asking after flash Nat Lee!'

It was Bertram's last visit to Limbo Street.

(To be continued.)

MORE GHOST-STORIES UNVEILED.

CONCLUSION.

SOME years ago, it was my good-fortune to be a frequent visitor at a fine old manor-house in Dorsetshire, built in the reign of James I., but much altered during the last half-century. Like all old country mansions, the house was of course 'haunted.' Strange sounds, like footsteps, had been heard coursing about at the witching hour of night, in the vast empty garrets and along the great passage or corridor, running from end to end of the building, into which the garrets opened; and odd and mysterious rattlings and clatterings, as of metal or chains. The country-folks and servants, and especially the old people—always the most ready to stick resolutely to a good ghost-story—firmly attributed these nocturnal noises, without thought or question, to supernatural agency.

When my friends acquired the property, they were quite aware of the evil reputation regarding ghosts, that clung to the fine old place; but not being believers themselves, they felt pretty sure that the mysterious noises, when boldly investigated, would be found to proceed from purely natural causes. Their opinions, however, were met by ominous shakes of the head on the part of the neighbours; and the great fact was invariably brought forward and solemnly insisted on that, as the original builder of the house, a certain Sir Thomas Stafford, had, in a fit of jealousy, cruelly killed his young wife, the house must, as a matter of pure reason, be haunted by her perturbed and restless spirit.

Nothing daunted, however, my friends entered on possession, and very soon discovered that the stories they had heard were by no means unfounded. The mysterious footsteps, the strange rattlings and clatterings, were distinctly heard, but always at the top of the house—in the huge empty garrets and the long corridor—but nowhere else. A little patient intelligence, assisted by the sagacious investigations of a clever bull-terrier, soon disclosed the fact of the presence of a perfect army of rats, which generally selected the silent hours of the night as the time, and the corridor and garrets as the place, for their nocturnal parades, exercises, or gambols; and the rattlings and clatterings, so metallic in sound, were simply due to certain of the large heavy roof-tiles which were loose, and to the old and very shaky iron rain-water pipes, which, just under the eaves, rested on equally shaky iron brackets; and the two certainly made up a very peculiar and ghostly sort of sound when working together in a moderate wind and heard in the dead of night. When this was explained to the peasantry, they looked incredulous, and evidently did not at all appreciate this way of extirpating ghosts.

But the house was not disposed to give up all at once its ghostly reputation. As I have already said, the old mansion had undergone many alterations, some of them dictated by reason, others by expediency. One of these was the removal of the fine old staircase, and the erection instead, of one of small confined dimensions, and very awkwardly situated and contrived. These stairs sprang from the foot of a wall, in which was placed, high up, a large window, so that any one going upstairs would have this window above his head and behind his back. It was exactly opposite the wall of the first landing-place, whence the stairs branched away to the right. I am thus particular in the description, because it is very necessary to comprehend the relative positions of wall and window, in order rightly to understand distinctly what follows.

One brilliant moonlight night, the family were about to retire to rest, when they were startled by a loud scream from one of the maids, who rushed into the dining-room, eyes staring, and mouth wide open, exclaiming wildly that she just 'see'd a awful ghost on the stairs, and was 'most frightened to death!' All the party with one consent arose from their chairs and ran into the hall, some carrying the candles with them. But nothing whatever was to be seen. The girl, however, positively declared she had seen a tall dark figure in a long cloak and hood standing on the first landing; adding, that she saw it all the more

clearly on account of the white wainscoted wall just behind, which served to throw the figure into relief. A general search, and a regular hue-and-cry all round the house, now followed; but with no result. Nothing was discovered in any way irregular, either in flesh and blood or in ghostly appearances.

About two nights after, however, the very same thing occurred again, at nearly the same time; the spectre was again seen by the same maid, and by the footman, who happened to be just entering the hall; the man most positively declaring that the figure stood, hooded and cloaked, exactly as the maid had described, on the top of the landing. The young men rushed into the hall with lights, as before, and with the same result—they saw nothing. Two of the sons—genuine ghost-hunters, who thoroughly entered into the ‘fun’ of the thing—determined to sit up and watch through the night, with the pleasant accompaniments of plenty of warm fire and bright light; but I need hardly say the brave watchers saw nothing, discovered nothing. His cloaked and hooded ‘ghostship’ did not appear again that night at any rate.

About a month afterwards, however, the same thing occurred again. A great commotion was heard in the hall—the ghost had again appeared, and, what was even more remarkable, had slowly disappeared just as the man-servant caught sight of it. This was almost too much for my friends, especially the junior branches, who were highly indignant at being so completely ‘sold’ by the spectre. But there was nothing to be done or discovered; so, after many threats of what they would do if they could only catch him, the whole party went off to bed.

Nothing further occurred to disturb the family peace until three days afterwards, when Jack, the youngest son, rose from supper to let in a favourite bull-terrier, Jinks by name—the doughty hero of the garrets and corridor—who was whining piteously, and scratching vigorously at the garden door. Jack had hardly entered the hall, when he rushed back into the dining-room post-haste, and holding up his finger in a mysterious manner, intimated in a regular stage whisper: ‘Here’s the ghost on the stairs again, hood, cloak, and all!’ His brother instantly jumped up, and both ran into the hall; and there, sure enough, on the first landing of the staircase, stood a tall dark figure robed in a long cloak and high hood. The young men both regarded the apparition intently for a few moments, and then boldly ascending the stairs, both burst into a loud ringing laugh, crying out that they had caught the ghost, and shouted for the family to come out and see, but to bring no lights, and they could judge for themselves.

The terrible mystery was now at an end. Just outside the staircase window at the rear of the house, was a small detached building used as a laundry; but, as the fireplace smoked very much, my friends had had a new and very much taller chimney erected. This was narrow at the top, and gradually got wider as it went downwards, and was capped by a large and peculiarly shaped cowl. The ‘ghost’ proved to be merely the shadow of this chimney and cowl outside, projected, by the bright moonlight, through the staircase window, on to the clear white-painted

wainscoted wall of the first landing. The sloping sides of the chimney gave the appearance of a cloaked figure, and the broad cowl looked exactly like a hood, whilst the dead white of the flat wall behind served to throw the dark shadow into very strong and bold relief. The reason now was clear why the ‘ghost’ was not seen oftener. It was simply that the shadow was only projected when the moon was just opposite the window; and its appearing gradually to fade before the footman’s terrified gaze, is easily explained by the passage of a dark cloud at the moment over the moon’s bright disc. Further, be it noted, that when the family entered the hall on the first alarm a month previously, many of them carried lights, and thus of course destroyed the appearance altogether. The window, moreover, was sometimes covered with a blind.

Yet, it will hardly be believed, that even after these perfectly clear, and equally natural and simple explanations of both the noises and appearances which had been heard and seen in the old manor-house, it was found very difficult to convince the peasantry and workpeople of the neighbourhood of the real and true nature of the occurrences. The people had, in fact, been rather used to their old friends the ‘ghosts,’ and to the reputation possessed by the old house of being ‘haunted,’ and did not at all relish parting with them on such very ordinary, commonplace grounds.

I will now give another instance, which partakes rather of the absurd than the terrible, though certainly mysterious enough in its way.

An American family resident in England occupied a large old-fashioned house in one of the southern suburbs of London. They kept two or three small but very valuable birds in a light cage inside their dining-room window. The cage rested on an odd-shaped sort of stand, made of hollow tin, painted green, having one leg in the centre supporting the cage, but spreading out at the bottom, and apparently resting flat on a square piece of smooth oilcloth. But in reality the stand had three small American casters inside, by which, as the whole was very light, it was easily and readily moved about if required. The family were remarkably neat and trim in their ways; the cage always stood in the middle of the square oilcloth, and that again just in the middle of the window. One morning the servants, on entering the dining-room, found the stand moved out of its regular position, and resting, sideways, at the edge of the oilcloth. Little notice would probably have been taken of this at all, had it not occurred again and again morning after morning; and great was the surprise of all when, on inquiries being made throughout the family and servants, it was found that no one had ever touched the bird-stand, far less removed it out of its position in the centre of the oilcloth. Investigations and inquiries alike were vain; the stand was repeatedly found to have been moved first to one side of the oilcloth, then to the other; but as nobody ever appeared to have done it, the family found themselves in the greatest perplexity to account for it; and matters began to look desperate, when the real cause of the mysterious movements was discovered by the merest accident.

It happened that one of the sons was one night

sitting late in the dining-room, waiting the return of a brother from the country. He appears to have dropped asleep, and the lamp to have gone out, when, just as he woke up, he was aware of a peculiar soft sort of scratching noise proceeding from the direction of the cage. Knowing that the birds must be fast asleep at so late an hour, without moving hand or foot he quietly raised his eyes, and saw, by the bright firelight, the stand slowly moving off towards the right! 'Ho, ho!' thought he; 'here's the mystery of the moving bird-cage;' and kept his eyes intently fixed on the stand. With many stops and little jerks, it was proceeding, in a wriggling, odd sort of way, to the edge of the oilcloth, when a big heavy lump of coal fell out of the fire with a loud crash, into the fender; which had the effect of frightening a couple of large mice, both of which had been busy at work *under the stand*, but, alarmed at the noise, had run out from the opposite side, and disappeared under the window-curtain.

Here, then, was the mystery at once explained. A hole in the skirting-board, concealed by the curtain, admitted these audacious little intruders, who were attracted to the spot by the bits of bread, sugar, corn, or seed which were dropped or spilt all round the cage and under the stand; and one caster being a little higher than the others, enabled the sagacious little foragers to get in underneath on that side; and their attempts to get out or pick up grain, just under the broad edge, easily caused so light a structure to move on its casters over the smooth oilcloth, until obstructed by the thick Turkey carpet on which the cloth rested.

I will conclude with just another story, partaking, like the last, more of the ridiculous than of the sublime, which was related to me by a relative, now deceased, who was staying in the house, many years ago, when the occurrence actually took place.

The house in question was situated on the north-west coast of Devonshire. It was large and very old-fashioned, with immense cellars, long passages, &c.; and there was a legend devoutly believed in by the villagers, that a notorious and peculiarly wicked and wealthy smuggler, known as 'Old Peter,' had committed suicide, long years before, in one of the caves amongst the rocks just below the house, rather than be taken by the soldiers who were in hot pursuit of him. It was also believed that these caves once communicated with the cellars of the mansion above; and that Old Peter's ghost on stormy nights often walked about the rocks and caves, and even the mansion itself, looking after his many sacks of gold, said to be hidden or buried somewhere thereabouts; although nobody could ever be found who at any time had seen him either in the house, on the shore, or indeed anywhere at all.

One summer night the household were greatly startled by one of the maids, in a fearful state of fright, declaring that on going to the cellar to draw the beer, she saw an appalling sight at the end of the dark passage—namely, a frightful and, what was far worse, a luminous ghost, with great glaring eyes and wide open mouth; which, of course, could be none other than Old Peter himself, because the old rascal saluted her with a terrible groan! One of the men-servants at once

entered the passage, but far more quickly retreated from it, with blanched face and staring eyes, declaring it was quite true. One or two others just peeped in, only to run screaming away; but all confirmed the statement of the undoubted presence of a hideous fiery ghost, with huge burning eyes, which every one, without a moment's hesitation, at once settled must be the veritable old smuggling villain Peter—it could, in fact, be no one else.

The proprietor of the house, Mr S—, now appeared upon the scene; and on being informed that the ghost of Old Peter was in the cellar passage, at once divining the true state of the case, he called for lights, and bade those who were not too great cowards to follow him, and he would soon show them how to manage Old Peter. One or two of the servants—but by no means all—plucked up courage to obey, though with trembling steps. As they entered the passage, whilst the heavy old door closed behind them, the same hollow groan which had so startled the maid was again heard, and found to arise simply from the grating of a very rusty old hinge, which Mr S— immediately pointed out. Then proceeding down the passage straight up to the end, they found Old Peter looking fearfully hideous, and still glaring in all his fiery radiance; when Mr S—, holding aloft the lights, bade his terrified followers say truly what they there saw. 'Who, I declare if it beant only the big ling what Measter cotch'd in the bay t' other day!' And so it really was, and nothing more—a splendid ling, nearly five feet long, which was suspended by the head, about six feet from the ground, at the end of the long passage; and being a little stale, the whole fish was phosphorescent, and beautifully luminous in the dark. The great round eyes no doubt had a peculiar glare; whilst the open gill just below would, to a startled imagination, look not unlike an open mouth.

But for this simple explanation, a good story would soon have got about that Old Peter had been seen in the cellar passage of the hall; and as the sight had been witnessed by several persons, it must as a matter of course be strictly true. And thus it is no doubt that many of the so-called 'ghost-stories' occur, and get repeated again and again, until at last they come to be steadfastly believed in by foolish and credulous people.

THE FENLAND OF TO-DAY.

WONDERFUL changes have passed over the Fen country even during the last few years. Draining and banking by dike and river, night and day the pumps are at work, forcing the water from the sodden lowlands to the higher levels of the brimming lodes; the black smoke pours from the tall chimneys, and the monotonous throb of the engines is ever audible to the passer-by. These grimy pumping-stations form hideous landmarks for miles and miles around; nor do they improve in appearance on a nearer acquaintance. But as we stand beneath them, with our back to the blank walls, lounging over the tiny bridge, the furnace, the sooty smoke, and the groaning of the machinery behind, are all forgotten in the cool fresh splash of the water below, as it rushes, gurgling

and foaming in its narrow gorge; then broadening on every side, it laps with tiny wave the grasses by the marge, where the iris and bulrush nod their heavy heads, and dance like shadows on the ceaseless ripples.

There is good fishing, too, below the race—roach and dace, perch and eels; and farther down toward the river, among the tangled water-weeds, great pike lie motionless beneath the banks. Here, where the swifter stream meets the sluggish river, it forms little whirlpools, bending the rushes as it curls eddying round their stems, ere it merges into the great volume of water that creeps lazily onward between its level banks, till it finally loses itself in the salt water of the Wash by Denver, where the great sluice keeps back the rising tides, guarding many a mile of fair rich cornland from the baffled sea. More picturesque are the old windmills, which, until the introduction of steam-power, forced the water from the Fen. Perched on green artificial mounds, with their black hulks and dark skeleton sails, they form conspicuous objects in the level landscape; but the mill-wheel usually lies rotting by, half-hidden in the rank herbage, and the sails are still. Quaint and spectre-like they stand, these relics of bygone days; though here and there, one still remains at work.

Long and unlovely are these Fen lodes. Inclosed on each side by high grass banks or *droves*, the tops of which form the highways through the Fens, and thus serve the double purpose of confining the water within its channel, and affording, when the floods are out, the only means of communication between farm and hamlet. As far as the eye can reach, the long stretch of water extends in endless perspective without a curve, slowly creeping along in its bed, cut through the black peat-mould, straight as a wall, its steep banks descending abruptly into the water on each side. Here and there, the edges are fringed with stunted reeds, cut and jagged by the haling-lines of the barges that pass to and fro. Then, after a course of some miles between these monotonous banks, the water finally empties itself through a tiny lock into the river below, where the willow-shaded cottage and garden greenery form a welcome oasis after its weary, shadeless course.

Less than fifty years ago, Whittlesea and Ramsey could boast of their famous meres. Where now, in autumn, wave broad leagues of corn, the shallow water stretched for many a mile, the reed-beds teeming with wild-fowl, while carp and tench, pike and bream, were abundant in the clear water below. Then one fowler could in a single day take scores of ruff and reeve, grebe or mallard; whereas now, the first two birds are practically extinct, and the two others are fast following after. Whittlesea was the largest lake in the southern shires, with an area of one thousand six hundred acres. Ramsey, although of smaller extent, seems to have been a very paradise. Its shores were rich and fertile, abounding with corn and fruit, pastures and gardens; and 'where the waters lapped gently on a sandy shore, and above towered stately woods of ash and willow, it was a delight to all who looked thereon.' Fair was the prospect along the sandy beach, and that not many years ago; but all is drained now. In winter, black peat-flats stretch

away on every side where lay 'the fair wide mere;' in summer, a rolling campaign of rich green corn. In autumn, it is fairest of all, when the heavy wheat-ears bend, and the soft rustle stirs along the broad expanse, gently heaving as a sea, amid which scarlet poppies rise and fall, now blazing in the sunlight, now hidden as the shadowy waves pass softly on.

It is early morning. The fields around are still wrapped in darkness; and above, the stars are twinkling in the huge vault of sky. Slowly and imperceptibly, a grayness steals over all; here and there, clumps of willow rise—dark, shapeless masses, from the surrounding gloom. Then low down in the east, first a pale cold light; then, as it broadens, a rosy flush tinging all the eastern sky; and above, the stars waning fast. Suddenly, from the twilight, far overhead, trilling clear and strong, a field-lark breaks the deep silence of the sleeping Fen, followed by another and another, until above, around, on every side, the skies seem breaking into song. The light broadens; the stars have faded, save westward here and there, a planet shines like silver in the pale azure of the sky; and the first breeze of morning sighs through the quivering aspens. Slowly the daylight creeps along the fields, and the dark reed-strips by the dikes grow green; patches of meadow-sweet, which a moment before glimmered feebly in the gloom, display their feathery cymes of crowded blossoms, hanging heavy with dew. Over the far-off dikes and lodes, the white mists lie in long lines of moving vapour, blurring the landscape; and nearer, from the lower ground, like steam from a caldron, the white clouds, clinging to the earth, travel on toward the water. Up leaps the sun. The slanting rays strike far along the dripping herbage; from each blade and leaf, all drenched with dew, the sparkling drops, hanging like jewels, flash and twinkle in the sudden light, and all the land awakes. A moor-hen flies low across the water, and with its harsh grating note, disappears where the steam curls thick among the reeds; and high overhead, lazily flapping through the clear blue sky, a heron sails away from the higher woods to his fishing-haunts by ditch or broad.

At noonday, in summer, beneath a cloudless sky, as we look over a Fen landscape, those miles and miles of hazy flats suggest but one word—Heat. White-heat, a scorching glare. The sun above beats pitilessly over the shadeless Fen; even the tall heads of purple willow-herb and iris droop over the tepid water by the river's brink. The growing corn lies motionless in languid curves; only the poppies, blazing full in the sun, lift up their scarlet heads, and glare defiantly. Beyond the dikes, over the distant fields, the heat rises flickering and quivering in thin transparent vapour, and finally melts into the white horizon. The cattle in the low pastures by the river instinctively seek the coolest spots; some under the nearer trees, where they stand patiently whisking their sides, surrounded by a dense cloud of insects; others in the water, where they stand motionless, with their broad dewlaps dipping in the stream, or wrenching in mouthfuls the tall umbels from the beds of wild parsley and fennel that fringe the river. Others congregate on the high flood-banks, to catch any possible stray breeze that may wander across the parched fields. Brindled, black, and

brown, they stand in sullen contemplation, or with massive head raised defiantly, as some unusual far-off sight or sound attracts their notice—studies such as Paul Potter or Vandervelde loved to paint.

By the lock where the lode falls to the river, we catch a glimpse of the keeper's cottage, white and cool among the monotonous foliage of the willows. The water is like glass, save at the weir, where it murmurs sleepily, dribbling over the great black gates in tiny streams. Far below, in the clear depths, great perch glide solemnly in and out between the rushes; and on the surface above, that curious insect the water-boatman plies his tiny oars, darting round and round in the shadow of the banks. The tar on the gates and posts around bubbles and blisters under the burning rays; and the stillness is only broken by the hum of some passing insect, or the splash of a dace or roach leaping among the cloud of flies that dance and travel up the stream. The only movement above or below is the ceaseless ripple of the water-reflection on the blistered boards; all else—cottage, lock, willows, and water—dozing to the murmur of the weir.

Here and there along the course of the river, in the low land behind the flood-banks, nestles a little homestead, surrounded by its plantation of aspens and willows, their soft gray foliage contrasting with the cooler green of towering ash-trees. Here too, around the garden and paddock, the hawthorn hedges grow high, mingled with the darker shades of alder and elder, the broad umbels of the latter hanging in creamy clusters over the stagnant ditches beneath. We might imagine ourselves far from the Fen country now. The tall bryony-tangled hedges are a welcome relief to the monotony of the miles of dikes. The pigeons on the reed-thatched barn coo softly in the sunshine, now skimming down to strut daintily on the straw below. Without, innumerable geese gabble incessantly among the duckweed in the shallow ditches, or waddle solemnly in single file over the high banks towards the river. In the low garden at the back, the flowers grow luxuriantly from the rich mould; a blaze of geraniums and calceolarias fringes the grass-plot, and tall hollyhocks rise behind. The wild flora of the Fenland too, mingles with the garden flowers. Here, by the dike that bounds the meadow, against the green background of the hedge, tall clarksia and willow-herb lift up their purple heads four or five feet above the grass; and lower, rising from the water, the yellow iris with its bright petals mingles with the darker umbels of the flowering rush. On the surface float the waxen cups of great water-lilies, white and yellow; and along the bank, the spreading veronica, with its brilliant blue flowers, creeps over the surface, smothering the stream as it oozes beneath. Pungent whiffs of peat-smoke are blown from the red-stacked chimneys; and on the door-step, a shaggy dog lies blinking in the sun. His duty is to guard the lonely homestead by night, and hunt up the cattle from the Fen.

But it is at sunset that Nature dons her most gorgeous attire. All is silent by the river, which gleams in the long straight reaches, or is lost to view between the banks; while farther on, the water again flashes as it curves out once more, and once more disappears. Above, the sky is

warm with a rosy glow, where waves of cloud, like flakes of burning foam, spread afar from north to south. The sun is hidden behind dark masses in the west; but the bright rays stream upward high overhead in long leagues of yellow light, that strike along the sky, till the cloud-flakes throb and flicker in the glow, their crimson edges touched with flame. Then, as the bright tints fade, the cloudlands shift, and pale rifts of golden green break here and there like far-off islands in a purple sea. The shadows deepen along the land, and the green on the distant fields is fading fast. Here and there, piercing through the gloom, the straight dikes flash as threads of silver; and the wider surfaces of the brimming lodes gleam pale and cold, broad bands of reflected light. No object breaks the level of the darkening Fen save a line of spectral aspens that mark some far-off boundary. They stand in long sloping files, each bare trunk leaning towards its neighbour, branchless, surmounted by a tiny tuft of foliage left unlopped; their tall stems rising gaunt and black against the sky. In the reed-beds by the water, and where the land lies low, white mists are steaming and curling above the rushes; and far away, the dark Fen is streaked with thin lines of filmy vapour. The cattle couch beneath the banks, among the dew-drenched herbage, their white breath steaming in the chilly air; and through the sodden grass above, the Fenman is plodding homeward, and night falls softly over the wide expanse.

But these broad green flats melting into the horizon are not the only landscape the Fens can display. Along the borders, woods and heath mingle with the peat-land. Westward, the higher grounds, by Huntingdon and Northamptonshire, rise crowned with their woods of oak and elm, where the massy foliage forms a refreshing variety to the soft monotony of the interminable rows of willows, the haunts long ago of kite and hawk and buzzard. Kite and buzzard have disappeared; but the sparrow-hawk may occasionally be descried sailing grandly along in sweeping circles, with his wide wings extended, hovering a moment, till mounting upward higher and higher, and balancing motionless, he falls swifter than the eye can follow in some distant field.

Away on the eastern border, by Brandon and Thetford, vast sandy heaths slope downward to the Fens; here, in long bare stretches; there, waist-deep in gorse and bracken—like the broad wastes of silver sand that border the fens of Holland, stretching away in naked ridges fringed with scrub—like these, but infinitely more beautiful. The blossoming gorse flashes a brilliant yellow light among the sombre bracken like tongues of flame; and above, the odorous fir-woods stand dark and solemn against the sky. It is in these bordering woods that the heron still breeds, no longer in the numbers of former years; still, we may see them at sunrise, or sunset, sailing away to fishing-haunts, now sadly restricted, from the broad meres of old, to the lonely margins of the rivers or reed-choked dikes. Here one stands in the stagnant water, motionless, with one leg drawn under him, and to all appearance utterly unconscious to everything around. But not so. At the crack of a broken twig, or the least rustle of the grasses, he spreads his broad wings, and flaps away with a lazy motion, sailing off high in air to some

more secluded spot. Over these heaths, once roamed the great bustard, swift of foot, coursed by greyhounds in the sporting days gone by. Not very many years ago, this noble bird was still to be met with; but now it has shared the fate of the crane and bittern, ruff and swan, and other exterminated wild-fowl. One instance of its appearance, we believe, has occurred within the last twenty years. Not so the peewit. This handsome bird may be seen wheeling above the heath in scattered pairs, upward and downward, now turning suddenly, and darting off again in short abrupt flights, ever uttering its plaintive cry. Its broad wings and glossy black-and-white plumage flash in the sun as it turns swiftly in its mazy flights. By night, they wail and shriek with a weird unnatural cry; one moment just overhead, shrill and piercing; the next, a long-drawn wail from the darkness far away. As the winter approaches, they descend in vast flights to the low oozy swamps left by the receding tide.

Northward along the coast of Lincolnshire, the Fen scenery changes again; the crested waves roll in before the wind, the foam-flakes driven far inland along the pasture-land. Look which way we will, as the sunshine strikes along the land and sea, it is the same—on the one side, long green pastures fading to the horizon, with Boston's famous steeple rising gray against the sky; on the other, a rolling plain of tumbled waves, that brighten like emerald as the sunbeams pierce through the leaping crests.

One lingering look at the great Fen beneath an autumn sky. The low sun strikes along the stubble-fields, touching the distant willows with a silvery light; olive shades are stealing where the foliage lies thick, and the fawn tints of the aspen trees wave into gold. Far away, the ploughman moves slowly over the broad 'forty acres,' where long black furrows already streak the stubble; along the fallow lands where the twitch-gatherers are at work, long lines of pale-blue smoke wander on before the wind, filling the air with the smell of burning peat. All colour has faded; even the rushes by the dikes droop low; only the high droves by the river-sides are green, and these too melt as they recede into the soft haze that mingles with the pale and cloudless sky. Above, around, on every side, turn which way we will, all the world is gray; the land sleeping in a hazy stillness, is like the calm of mid ocean, as peaceful, and as monotonous.

A COLLIERY-MANAGER'S STORY.

'If you please, sir, t' pit-hill's o' fire!'

Such was the news I received one wild November night some years ago; and as I looked across the park which lay between my house and the colliery, I could see by the glare, which grew intenser every moment, that the fire had already gained considerable hold upon the wooden platform about the pit's mouth, which in Yorkshire is called the pit-hill or bank. It was then twelve o'clock; and I knew that two hours before, nearly a hundred men and boys must have gone into the pit, on the 'night-shift.'

In a few minutes I was on my way to the scene of the disaster. As I approached, I saw that the sides and floor and roof were already

burned away, and nothing remained but the thick timbers which formed the framework of the 'bank.' Some of these beams were of gigantic thickness and height; but the fire quickly swept around them and leaped up to the very top, until the whole vast 'skeleton' of the structure could be distinctly seen. The great pulley-wheels, high over the pit-head, were of course motionless; and the strong wire-ropes which passed over them down the pit, made two dark lines in the midst of the glare, which seemed to point perpetually to the men imprisoned below. It was a stormy night, and as the wind swept through the burning timbers, it carried off great masses of blazing wood—not mere sparks—and sent them flying over the yard and into the adjoining fields.

When I reached the burning bank, I found there was little hope of saving any part of the pit-hill. Fire-engines were at work; but the water did nothing but hiss and spit against the red-hot beams, and the fire continued to rage more fiercely than ever. The engine-house, containing the powerful engines that worked the great winding-drum, was close at hand, and a little beyond was the 'upcast' or ventilating shaft. It was quickly perceived that our only chance of rescuing the men lay in cutting off the fire from this building and the platform which led to the second pit. To do this, it was necessary to saw through two beams of timber nearly two feet square. This was a hard and perilous task; but there were men there brave enough and strong enough to do it; and it was done, and the engine-house saved. As soon as these beams were liberated, a great portion of the burning pile came crashing down; and as the falling timbers fell upon the wagons that had been partly filled with coal the day before, fresh fuel was added to the flames, which now rose up in columns that towered even above the head-gear. Every eye now was fixed upon the ropes and the pulley-wheels at the top. The thick iron band began to swell, and the strands to break; snap, snap went the wires; the hempen core within the wire took fire, and then at last the rope gave way, and down went the iron cage to the bottom of the shaft. Shortly afterwards, the pulley-wheels dropped from their lofty perch, and were buried in the blazing heap far below.

There was nothing left now but to let the pit-hill burn itself away. But what about the men in the pit? Experienced underground-stewards, and a mining-engineer who had been summoned to give his advice, were busy all through the night devising plans of rescue. Some of them indeed gravely doubted whether the work would not prove to be the recovery of dead bodies, rather than the rescue of living men; but they did not tell their doubts to the weeping women who gathered eagerly about them whenever they came out of the office. The first thing to be ascertained was whether the men in the pit were still alive. The ventilating shaft had formerly been used as a 'drawing-shaft'—that is, a shaft by which men could be sent into the pit, and coal drawn from it—and fortunately the pulley-wheel still stood in its place over the shaft. A rope was quickly fixed to the old drum, and the long-disused 'tub' swung at the pit's mouth ready to go down. A lamp was placed inside the tub, and with it a note, written by the manager, asking for information as

to the condition of the men and the state of the workings, but warning the poor fellows against getting into the tub, as we were not as yet certain that it would be safe for them to ascend in it.

While these preparations were being made, the crowd about the old shaft increased both in numbers and in noise: old colliers eagerly discussing various methods of 'getting 'em out;' and the wives, mothers, and friends of the imprisoned men impatiently urging the workers to 'luke sharp and fetch 'em up.' As the tub began to descend, however, a sudden silence fell upon the throng, and every eye followed the rope as it disappeared in the smoky shaft. It was decided to leave the tub at the bottom half an hour, before drawing it up again; and for those thirty minutes no sounds were heard except the crackling of the still burning timber, and the low moaning cries of sorrowing women. Now and then, one of the banksmen leaned over the mouth of the pit, in the hope of catching some sound of a movement in the dark depths below; but nothing was heard; and at length the signal was given to bring the tub up again. Eagerly did the watchers peer down the shaft; and when the solitary lamp was seen glimmering amid the ascending smoke, stronger whispers of hope were breathed than had been heard before. But, alas! the letter came back unopened, by the side of the lamp. It was clear that no men were at the bottom of that shaft, and that the light had not been seen by those below.

After a short interval, the lamp was again placed within the tub, and again the tub was lowered into the pit, and left standing at the bottom for half an hour. Occasionally, the rope seemed to quiver and shake, as if some hands were clutching it below; but this could not have been the case, as, when the tub came up again, the light was extinguished and the letter was still untouched. Even the most hopeful were now inclined to despair; for it was argued that if the lamp could not 'live' at the bottom of the pit, no human being could live there. But still we decided to repeat the experiment. Again the tub, with the lighted lamp and the letter, was carefully lowered; and after a short interval, it was brought up once more. This time, the lamp still burning, raised our hopes that the men might, after all, be living; but the untouched letter told us that they had seen nothing of our silent messenger.

When the fire, which had now been burning nearly seven hours, had almost spent itself, and the smoke coming up the ventilating shaft grew less dense, several miners heroically volunteered to descend the old shaft in search of their 'mates.' The descent was extremely dangerous—it might even prove fatal—still no one, not even the wives and children of the volunteers, sought to keep them back.

'Let 'em go,' said one of these brave women. 'If my man were down t' pit, sudn't I want somebody to try to get him up? Let 'em go; but God save 'em, and them as is at t' bottom too!'

Thus encouraged, three men took their 'Davy' lamps in their hands and stepped into the tub. The signal was given; and slowly, very slowly, the tub went down into the darkness; but the lights had scarcely disappeared, when shouts from the men bade us reverse the engine and bring

them up again. The shaft was so 'foul' with smoke and bad air, that they had been almost choked.

The failure of this attempt to reach the poor prisoners in the mine sorely tried the spirits of the strongest and most hopeful among us; and big stalwart men, who had faced many a danger without flinching, turned aside to hide the tears that would steal down their grimy cheeks; while women and children ran down the hill despairing, and sat down to weep and moan in little groups, amid the weird light of the slowly expiring fire. It was a heart-rending sight, one never to be forgotten. My sympathies led me to go among these poor stricken souls, and try to comfort them with such hopeful words as I could command. I could not say much to them, and they could say nothing to me but, 'O sir, do you *think* you'll get him out?' 'We'll try,' was all the answer I dared give, but even that seemed to comfort the half-despairing creatures.

Again we tried the lamp-and-letter plan of reaching the men. This time, we let the tub remain at the bottom of the shaft only fifteen minutes; and as it came up again, Jack Lucas, our chief banksman, stretched himself so far over the mouth of the pit, in his anxiety to see what was in the returning tub, that he was in danger of losing his balance and falling to the bottom. I knelt by his side; and presently he whispered to me: 'There's summat in t' tub as didn't go down in it.' As the tub came nearer, he said: 'It's a powder-can.' And then we knew that some of the men were safe; but we dared not speak as yet. At last the can came within reach. Jack snatched it out and handed it to me. I opened it; and there, on a piece of dirty paper, was the long-looked-for message from the mine: '*We have got all the men and boys to the bottom of the shaft, and they are all right at present. I put the ventilation on again as soon as I could, and it is now in working order. Some of the ponies were nearly done for, but I hope they'll get over it. Now, if you think it will be long before you get us out, you had better say; and please, send us something down, for some of the lads are sick and numb with smoke.*' I had great difficulty in reading this simple letter aloud; my utterance was half-choked with emotion; and fervent cries of 'Thank God, thank God!' from the overjoyed people who crowded about, interrupted me at almost every word.

We were not long in sending 'something' down to the prisoners, in response to their appeal, as we had provided refreshments of various kinds, to be ready, in case we opened communication with the men. This done, the next step was to arrange for bringing the poor sufferers out of the pit; which we found to be a most tedious and difficult task. There were no 'guide-rods' at the sides of the shaft, to keep the tub steady, and therefore it had to be lowered and raised with very great care. The three men who had before attempted to descend, claimed the privilege of going down first to superintend the actual work of deliverance. Only four persons could get into the tub at one 'lift;' and so the patience of the prisoners at the bottom and of their friends at the top was severely tried. The sickly ones were first cared for and sent up; then the boys, and after them the men; the old 'deputies' or 'overseers' being last to ascend,

until at length the joyful words were heard: 'The last man is out!'

I will not attempt to describe the scenes that were witnessed on the 'bank,' as the rescued colliers stepped out of the tub. Wives led away their husbands, and mothers led off their sons; some speechless with gratitude and joy, and others hysterically alternating between laughing and crying, hardly knowing what to say or do to give vent to the strong emotions which filled their hearts.

As soon as the excitement had passed off, I sought to learn what had been the experience of the men while in the pit. It appeared that the first sign observed that 'something was wrong' was the smoke, which at first went creeping down the big shaft, and then began to roll in great clouds into the workings of the mine. What the 'something wrong' was, the overseers could not at first make out—a pit-hill on fire is fortunately a very rare spectacle, and neither of the overseers in the pit that night had had any experience of such an occurrence. They soon came to the conclusion, however, that the 'hill' must be on fire, or so much smoke would not come down the shaft; besides which, when they rang the signal-bell from the bottom to the top, they could get no reply. Strange to say too, one of the 'deputies' had dreamed the day before that he saw a pit-hill on fire, and he now instantly exclaimed: 'My dream's come true—t' benk's o' fire!' This sad conclusion was no sooner reached, than the two men set about warning their comrades who were at work in various parts of the mine. One of them ran along the 'roads' in what was known as the 'west district;' and the other scoured the north and east 'districts,' calling upon men and boys to cease working, and hurry to the bottom of the shaft as quickly as possible.

Having raised the alarm, the deputies on returning found that the ventilation of the pit was being disturbed, and that smoke was fast penetrating into all the air-ways. With great presence of mind, though running tremendous personal risks, one of them took a step which undoubtedly prevented the sacrifice of many precious lives; he went back to close the doors, through which the smoke was rapidly sweeping into every part of the pit, and then made a clear course in the passage leading direct from the downcast to the upcast shaft, so that the smoke coming down from the fire above might be drawn towards the upcast or ventilating shaft, and so pass out of the mine altogether. This being done, all the men known to be in the pit were got together in the 'deputies' office,' and a consultation held as to what was best to be done. Some of the poor fellows were sick with smoke, others were faint with fright, and a few sank into a state of unconsciousness, from which they did not recover for two or three hours. At the underground furnace—used to promote the ventilation of the pit—the smoke was terribly dense; but in spite of the discomfort and suffering he had to endure, the furnaceman had stuck to his post, and so preserved himself and his fellows from actual suffocation. In spite of all that could be done, however, the smoke at last began to tell upon some of the older men and the boys, and a great number of them sank down helpless, hardly expecting ever to rise again.

When the fire at the bank was raging most fiercely, the condition of affairs with those below was painful in the extreme; one after another succumbed to the hot fumes, and hope forsook the hearts of such as retained consciousness. When they heard the cage come thundering down the shaft, they knew that all access to them by the usual means was effectually barred, and they had scarcely enough energy left them to think of any other possible way of escape. How long they might survive, they could not tell; but the hope was but faint in the most confident heart that they would ever greet their beloved ones on earth again. In this extremity, one pious soul burst forth in earnest prayer; when he had ceased, another voice was heard, and yet another. Sounds were then heard in that dismal place such as had never been heard there before; a well-known hymn was sung—*Safe in the Arms of Jesus*; sung with choking voices, and while tears rolled down every cheek.

By-and-by it occurred to one of the overmen that perhaps those on the surface might attempt to reach them by means of the upcast shaft; at anyrate, he would find his way to the bottom of that shaft, and see if it were possible to hear any voices. He went, and as he passed through the last gate, he thought he saw the glimmer of a light. What could it be? Had some comrade, who had been overlooked, found his way thither out of some distant part of the pit? Was it the lamp of a fellow-prisoner that he saw? He hurried on, and found, to his heart's deep joy, the tub, containing the lamp and the letter, which had been sent down as a message to himself and his fellow-prisoners. Hastily returning to his companions with the welcome news that rescue was possible, a reply to the manager's note was scribbled and inclosed in a powder-tin, and placed in the tub. All now made their way to the bottom of the upcast, the strong helping the weak along the rough road; and in due course, as we have seen, the imprisoned miners stood once again on the bank, and saw the light which they thought had vanished for ever, and saw too the familiar faces which they had hardly expected to see again. It would have been difficult to say whether rescued or rescuers were the happier, as they shook hands and parted at the old pit-bank after that terrible night.

THE MONTH.

SCIENCE AND ARTS.

THE largest refracting telescope yet produced has just been finished by Mr Grubb of Dublin, for the Vienna Observatory. The steel tube, measuring thirty-three feet six inches in length, and weighing with the attached parts nearly seven tons, has a diameter of three and a half feet in the centre, and tapers towards the ends. The aperture measures twenty-seven inches. In the meantime, the Americans are constructing a refractor with an object-glass thirty-six inches clear aperture; and another of fifty inches is contemplated. Seeing that there has been much difficulty in procuring perfect discs of glass for the Vienna instrument, it is not easy to see how lenses of larger size can be constructed without flaw. The fact that the giant telescope has an object-glass only one inch

larger than the biggest previously made, would tend to show that the limit in size is being nearly approached.

The terrible earthquake at Agram has been quickly followed by the frightful disaster at Casamicciola, where in one instant three hundred houses fell with a crash, burying their unfortunate inmates. And another earthquake of still greater violence has occurred at Chio in the Greek Archipelago, whereby some thousands of human beings were instantly killed or rendered homeless. With respect to the Casamicciola catastrophe, it was at first conjectured that the movement of the earth was connected with certain disturbances of Vesuvius the day before; but Professor Palmieri states that the delicate instruments at the mountain observatory were perfectly quiet during the calamity. He traces the cause to the manner in which the island has been honeycombed by the natives, for the purpose of finding the mineral springs which bring them in such a rich harvest from visitors. In addition to this, the ground is being continually robbed of a species of fine clay much used for pottery. Signor Stefanoni, rejecting this theory, also points to the circumstance that earthquakes often occur in places where there are no active volcanoes, and that the usual explanation, referring them to the pressure of liquid underground lava, is not sufficient. The solution of the problem which he offers is based upon a well-known natural law, and is as follows: 'Rocks of volcanic origin, which have been subject to the influence of a very high temperature, are expanded by heat to a greater extent than any metal. They are therefore subject to strong contraction under the influence of cold; such contraction cannot take place without causing fractures in the rock, which create violent oscillations capable of producing an earthquake.'

A Stenographic Machine is now in use at Paris. It is worked by means of a keyboard, and an alphabet of six elementary signs, from which are combined seventy-four phonetic letters. As fast as a person can speak, the operator can print his words in these signs, which can be learned in a few months. It is suggested that blind people would probably make good operators, from the acute sense of hearing which they commonly possess. The Stenographic Machine, the maker of which we have been unable to discover, is adapted to any language; and if the words are spoken with deliberation, the operator can record them, although they may be to him in an unknown tongue.

An American novelty takes the form of an imitation wood for floor-boards, &c., made from compressed straw. In appearance it is said to resemble a hard, close-grained wood. It can be worked under a plane, will hold nails and behave in every way like ordinary timber. But it has not the disadvantages of real wood; for it owns no flaws—technically called 'shakes'—is not subject to dry-rot, has no inconvenient sap, is waterproof, will not warp, and has greater tensile strength. Whether it can be made commercially to rival timber in a country like America, which is so rich in forest-land, remains to be seen. But if all that is reported about it be true, various uses will doubtless be found for it.

The restaurants and large cafés in Berlin have lately rejected ordinary stoneware and china plates

for those made of *papier-mâché*. The change seems to be pleasing to all concerned. Breakages are at an end; and the articles have so little intrinsic value, that the guests are at liberty to carry them away, for the sake of their prettiness.

The last application of the Luminous Paint promises to be a very serviceable one. Mr Browning, of 63 Strand, London, the well-known optician, has hit upon the idea of coating compass dials with the pigment, so that the belated traveller or seaman need have no fear of losing his way for want of light.

A French doctor has called attention to a case of illness caused by sleeping in a newly papered room. Upon examination, it was found that the paste used for attaching the paper was in a state of putrefaction. Further inquiry brought to light other cases of illness, which were also traced to the impure odour from paste or size undergoing septic change. This change can easily be arrested by the addition of salicylic acid, oil of cloves, Condy's Fluid, or any other antiseptic medium. Most people are familiar with the unpleasant smell of a newly papered room, and when they know that it is sometimes accompanied by actual injury to health, they will be careful to point out the easy remedy to the careless workman.

M. Alfred Dumesnil is said to have discovered a method of preserving plants in a vigorous state without any earth. The process, which at present remains a secret, does not put a stop to the usual phenomena of plant-life; for the subjects experimented on—hellebores, daisies, auriculas, roses, &c.—blossom almost abnormally, and throw out new buds. If all this be true, the floral decorations of the future will be something to look forward to.

Professor Hughes, the inventor of the Microphone, has lately published the result of some experiments he has made with the Gower Telephone. This form of instrument is the one adopted by the Post-office, and is generally admitted to give the best results. From exhaustive trials, Professor Hughes is led to believe that its superiority is mainly due to the Microphonic Transmitter which is used with it. With the same Transmitter, he found that the original telephone of Professor Bell was 'more perfect in its articulation, and louder.' We may remind our readers that the Microphone is public property, for its gifted inventor refrained from protecting it by patent. But if our future telephonic system is to owe its efficiency to that invention, Professor Hughes is entitled to the honours.

At a recent lecture at Glasgow on Gas and Electricity, Dr Siemens pointed out that the usual method of heating the gas retorts was as wasteful as coal burned in any open grate must be. He suggests that the coke left in the retorts after the gas is made, should be used as the heating material, and that the red-hot mass should be fed with jets of steam. By this means, the steam would be decomposed, and a quantity of hydrogen of great heating power would be produced. The experiment is to be tried at the Dalmarnock gas-works; and if successful, it will point to a method of firing, which may be used for other purposes besides the manufacture of gas.

The Report of the National Lifeboat Institution for the past year represents a document in which

all dwellers in Britain must feel some pride. The Society now owns two hundred and seventy life-boats; and during the past year, five hundred and seventy-seven persons were rescued from wrecked vessels, in most cases under circumstances which called for the greatest coolness and courage on the part of the rescuers. The number of lives saved by the men since the establishment of the Society has been nearly twenty-eight thousand. Subscriptions towards this beneficent object should be remitted to the Secretary, 14 John Street, Adelphi, London.

Dr G. M. Beard, of New York, lately visited Europe for the purpose of studying the methods adopted by different countries in the treatment of the insane; and the results of his inquiries have just been published in a pamphlet. He puts Great Britain first of all nations in its care and treatment of these afflicted ones; and of the three British Isles, Scotland has, in his estimation, earned the first place. He holds that the insane should be treated with no more restraint than children; for, as a matter of fact, diseases of the brain deprive them of the advantages that come with maturity and education. He noticed during his tour that the most successful asylums were not imposing buildings, but consisted of detached houses or cottages. With regard to treatment, we may here mention that in Morningside Asylum, Edinburgh, amusements in the shape of music, dancing, &c., are encouraged; and a newspaper, edited by one of the inmates, has flourished for many years in the institution. In Germany, which Mr Beard places on his list next to Britain, he was surprised to find that the lunatics were taught trades; and that in many cases, a better day's work was done than by an average workman in full health.

In the treatment of another class of unfortunate sufferers—namely, deaf-mutes, Germany takes the first rank. An International Conference held at Milan last September, for the purpose of collecting evidence as to the best mode of teaching those who have mouths, but speak not, came to the conclusion that the German, or pure oral method, was the best; one hundred and sixty-four out of one hundred and seventy experts giving testimony in its favour. This Congress has lately been followed by one in London, the first of its kind in this kingdom. Resolutions were here passed in favour of the pure oral, or mute lip-reading method; and to the effect that government should undertake the education of deaf-mutes by that method. We may mention in this connection that Professor Bell, who first taught a telephone to articulate, has been most successful in teaching this system of lip-reading to the deaf and dumb. Some further particulars regarding this interesting subject may be gleaned in *Chambers's Journal* for June 21, 1879.

A Conference of another kind has recently been held in London, its purpose being to consider the advisability of compelling people to notify to the proper authorities the existence of infectious diseases, such as small-pox and scarlet fever. In the course of the proceedings, it was suggested that any person suffering from such disease, and being without proper lodging and accommodation, should be removed to a hospital without delay; and that any justice should have power to direct such removal. In Scotland, the magistrates of

burghs have already this power under the Police Act.

Those who object to vaccination will perhaps reconsider the matter when they are assured that the vaccine lymph can be readily obtained direct from the calf. In the Civil Service estimates for the coming financial year, provision is made for salaries and other expenses incidental to an 'Animal Vaccine-lymph Station,' founded on the model of those successfully established on the continent. In the meantime, Mr J. L. Hamilton proposes to introduce an artificial lymph, produced without animal contact, by isolating, and then breeding the vaccine organisms in suitable germ-nutritive solutions.

Mr Fletcher, of Museum Street, Warrington, whose name has more than once appeared in these columns in connection with mechanical inventions, lately delivered at Manchester an interesting and instructive lecture upon Labour-saving Appliances for Domestic Use. He showed how, with properly arranged gas connections—stoves, water-heaters, &c.—one pair of hands could do the work of two. He explained how a gas-stove of good construction could do the kitchen-work of a house better and more economically than a coal-fire; and illustrated his remarks by cooking in a gas-oven, presumably of his own manufacture, some salt herrings, a fowl, and a fruit-pie; showing that such strange partnerships may exist without transfer of flavour from one to the other. The subject seems to us to be one of considerable economic importance.

A new application has been suggested for the Detective Camera to which we called attention last Month—namely, for the treatment of suspicious visitors to bankers' counters; the pressure of a button being sufficient to secure a carte de visite of the customer for future identification. It is said that in France a camera has been for some time employed for this purpose. It is further proposed to use this hidden artist as a kind of over-looker in factories. Connected with a clock, the Detective Camera could be made to furnish pictorial records of the behaviour of the operatives, and those given to obstreperous conduct would be taken in the act!

An ingenious and effective means of transplanting trees has been recently contrived by a gentleman signing himself Philodendron. The apparatus employed has the appearance of a large fork, weighing about fifty pounds. This fork is urged into the ground by a see-saw motion in front of the tree to be uprooted. A fulcrum is then placed underneath it, and a tubular lever about eight feet long is attached as a prolongation of the fork handle. One or two men then exert their strength on the lever so formed, and the tree rises from the earth. The roots are drawn out entire, so that the growth remains uninjured. The entire operation for a tree ten feet high occupies about three minutes. The agent for this Tree-lifter is Mr J. Charlton, Parade, Tunbridge Wells.

A Berlin oculist recently saved the sight of a workman who had a small splinter of steel imbedded in his eye. It became necessary to find a means of relief, or to remove the eye. The operator used an iron probe, which, when in contact with the fragment of steel, he converted into an electro-magnet; and thus the foreign body was removed. Ordinary 'permanent' magnets have

been used for the purpose before; but this, we believe, is the first time the electro-magnet has been so employed. Its superior power at once points to the advantages it offers, particularly in cases where the metallic fragment is firmly fixed in the cornea. Such accidents are by no means rare; indeed, in iron-works they are so common, that very often the workmen get most expert in removing the intruders by far more simple means.

Farming on joint-stock principles, although hitherto unknown in this country, has met with great success in America and also on the continent of Europe. A Company has just been formed to try the experiment in England, as a remedy for the present lamentable state of the farming industry; and the progress of the movement will be watched with great interest. At the present time, when thousands of acres are lying idle, because no applicants for the land present themselves, there is a peculiarly favourable opportunity for the success of such an enterprise. The land is of course cheap; and the introduction of first-class machinery—impossible to the small farmer—would give it a good chance of paying a fair dividend. The Company starts with a nominal capital of a million in shares of five pounds each, one-tenth only of which will be called for at the outset. Ninety-six thousand acres, at present bringing in little or nothing to the owners, have already been offered to the Company on very favourable terms; and in a short time we may hope to see the new and praiseworthy venture in prosperous condition. We may also mention in connection with this subject that English proprietors are now inviting Scotch farmers to cross the Border.

M. Muntz has for some time been occupying himself by studying the phenomena occurring when grain is stored for future use. Contrary to the behaviour of a growing plant, the grain so treated absorbs oxygen and gives off carbonic acid. The amount of gas given off varies with certain conditions of temperature and moisture. It is a curious fact that very dry grain gives off little carbonic acid, and is therefore exposed to the ravages of insects which are no longer deterred by the presence of an asphyxiating atmosphere.

So many patents have been brought out in the direction of newfangled shapes for the blades of screw-propellers, that one would imagine that there was nothing fresh to invent in that well-explored field of research. Some misgivings were therefore aroused as to the alleged performances of a new form of screw-propeller introduced by a Mr De Bay; for engineers were loath to admit that anything could be produced to beat in efficiency the best forms in common use. The new propeller is a double one, the two screws moving close to one another, but in opposite directions, the effect being that the whole power of the propeller is utilised in driving the ship through the water. A vessel—the *Cora Maria*—was recently fitted with the new apparatus, with the surprising result, that the accession of speed was equal to that which would accrue from her engine-power being doubled. Many engineers and representatives of the large steam-ship Companies have watched recent trials of the propeller, which, if found to withstand wear and tear, will probably be largely adopted.

The Ashton Moss Colliery Company may be congratulated upon having successfully accomplished a work commenced just six years ago. At that time, a shaft was commenced upon an unworked portion of Ashton Moss, with the hope of finding coal. This they have just achieved at a depth of eight hundred and ninety-five yards from the surface, and the available field of labour measures about two thousand acres in extent.

Mr Eyre, of the firm of Heathfield, Eyre, and Co., London, has introduced a new form of Smith's forge, in which the waste heat is utilised in blowing the fire, thus dispensing with the ordinary bellows. A small boiler suspended under the hood of the forge furnishes a two-inch cylinder with steam; and this little engine actuates a fan which supplies the necessary air. The motor can be used for other purposes, such as turning a lathe or a drill, and represents one horse-power.

OCCASIONAL NOTES.

SINGULAR METHODS EMPLOYED BY SMALL BIRDS OF CROSSING WIDE STRETCHES OF SEA.

A correspondent of the *New York Evening Post* has recently communicated to that paper some interesting information, partly from his own observation, and partly from inquiries, regarding the methods adopted by small birds, but particularly by the wagtail, for crossing the Mediterranean from Europe to the coast of Africa, and to Crete and the adjacent islands. The writer, while passing the autumn on the island of Crete, often heard the song and twittering of small birds when flocks of sand-cranes were passing overhead towards the south. Upon mentioning the circumstance to one of the priests on the island, and suggesting that the noise was caused by the wings of the cranes, his reverend friend assured him that it was caused by the small birds which were *being carried on the backs of the cranes*. After again suggesting that possibly the small birds might be in the habit of going out from the shore for a short distance and then returning with the cranes, the answer was: 'No; they come over from Europe with them.' Convincing proof was shortly afterwards given, when the writer happened to be cruising one day about fifteen miles from the land, and a flock of cranes passed quite close to the yacht. The men drew his attention to a peculiar chirping; and upon discharging his gun, three small birds were observed to rise up from the flock, and shortly afterwards to disappear again among the cranes.

Upon another occasion, during a visit to Cairo, the writer observed numerous wagtails among the palm gardens, and this he was at a loss to account for, having always been under the belief that these birds wintered in Southern Europe, or at furthest in Sicily or the Grecian Islands. He was also unaware at that time that they were birds of passage. Happening one evening to notice some wagtails hopping and 'tilting' at a short distance, he pointed them out to an old Bedouin chief, at the same time expressing his surprise that these birds were able to perform the journey across the

Mediterranean. The Bedouin at once replied: 'Do you not know, Hadretch [noble sir], that these small birds are borne over the sea by the larger ones?' He also intimated that this fact was well known among the natives. Upon pointing out the birds to two Bedouin boys who were standing near, and inquiring: 'Do you know whence come these small birds?' they answered: 'Certainly: the Abu Saad [the stork] carried them over the sea.' Von Heuglin, the famous African ornithologist, afterwards informed the writer that he believed this curious story, and only waited for further proof before publishing the fact.

Mr Rae of the Royal Institution, in a communication sent to *Nature*, mentions a somewhat similar story, told and believed in by the Indians in different parts of North America. It appears from the testimony of the Indians round the south-western parts of Hudson's Bay, that there is a species of finch which performs its northern journey on the back of the Canada Goose (*Anser Canadensis*), and arrives with it about the end of April. Mr Rae believes that he has himself seen the small birds fly away from the geese, and he has also shot and preserved the species; but it is so long ago, that he cannot recollect the name.

If the foregoing statements can be borne out by further investigation, it will serve to explain how it is that small birds—or at least some species—contrive to cross wide seas, and even oceans.

'PHASES IN CANADIAN HOME-LIFE.'

Since this article appeared in *Chambers's Journal* (January 1), we have received various communications from correspondents in Canada, from which we learn that the particular experience of our contributor while in that country cannot be said altogether to represent the general experience of those who have had a longer and more extensive acquaintance with the Dominion. With regard, for instance, to the tomato-worm and the potato-bug, we are assured that neither of these two creatures can now be distinguished as a persistent 'pest'; while wolves and bears have in the present day almost, if not altogether, disappeared. The progress made by a new and flourishing country such as Canada, is so rapid and decisive, that descriptions which might hold good of it to-day would within a comparatively few years seem erroneous and antiquated. In the article in question also, it was stated that farms could be bought in Canada for 'from one to five dollars' per acre; this should have been from one to five pounds. While cleared farms near towns frequently bring a much higher price than five pounds per acre, there are, on the other hand, as we have before stated in these columns, thousands of acres of excellent land to be had in the more westerly districts of Winnipeg and Manitoba at a merely nominal price. Good farms in the neighbourhood of towns bring from nine to thirteen pounds per acre; but the price generally decreases in the ratio of the distance from market. Those of our readers who are interested in the question of farming in Canada, will find much valuable information in the recently published *Reports of Tenant Farmers' Delegates* from England, Scotland, and Ireland, on the Dominion of Canada as a field for settlement, which are sent free on application to J. Dyke, Canadian Government Agent, Liverpool.

REMARKABLE CASE OF LONGEVITY.

A correspondent writes to us as follows: 'At present there is living at Dunoon, Argyllshire, an old man named M'Arthur, who, if he lives till next September, will have attained the patriarchal age of one hundred and four years. Living for a part of each year in the neighbourhood, I have often had an opportunity of seeing him walking about his garden, with the help of a stout stick. He was able to attend the Free Gaelic Church—of which I understand he is a member—several times during last year. His eyes are weak, but his hearing is very acute. He was born at a place called Achadunna, at the head of Loch Fyne, in September 1777. He was employed for fully fifty years at farm-work in the vicinity of his birth-place, and for the past fifty years has resided at Dunoon. Last year, being desirous of seeing and conversing with the old man, I paid him a visit. I found him seated in an arm-chair at the fireside, and he shook hands with me very cordially and with a firm nerve. He appeared to be cheerful and contented, informed me that he ate and slept well, and, strangest of all, that he was still able to shave himself without the aid of a looking-glass. He is wonderfully hale, with a freshness of complexion one would scarcely expect to see in a person of his years.

'Waiting upon him was an old woman, who observing one of the ladies that accompanied me looking at her, said she "thought the miss took her for the wife;" at which remark the old man smiled. The woman, continuing, explained that she was "only the daughter;" that she was, however, seventy-eight years of age; and that her daughter, whom we also saw, was fifty-six. The old man's wife, who died twenty-three years ago, would now have been one hundred and fifteen years old, being thus about eleven years older than her husband. Besides the daughter above mentioned, he has two sons living, both of whom follow their father's occupation; but they are much troubled with rheumatism, and not able to do much.

'Since the foregoing was written, I have again visited the old man, who anticipated some amusement when his census paper came to be examined by the district enumerator!'

A LOVE'S LIFE.

'Twas Spring-time of the day and year,
Clouds of white fragrance hid the thorn;
My heart unto her heart drew near,
And, ere the dew had fled the morn,
Sweet Love was born.

An August noon, an hour of bliss
That stands amid my hours alone,
A word, a look, then—ah, that kiss!
Joy's veil was rent, her secret known,
Love was full grown.

And now, this drear November eve,
What has to-day seen done, heard said?
It boots not: who has tears to grieve
For that last leaf yon tree has shed,
Or for Love dead?

JAMES ASHCROFT NOBLE.

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